

OBRA '87 COST ANALYSIS

The West Virginia Health Care Association commissioned Ernst & Young (EY) to conduct an analysis of the cost increases expected to be incurred by nursing facilities in meeting the mandated requirements of implementing OBRA '87. This primarily consisted of detailed mailed surveys to each facility, as well as some significant telephone follow-up. Input was sought from key State personnel in the development of the survey instruments, as well as the methodology to be employed in compilation and review. Therefore, upon completion of the evaluation, the State accepted the EY analysis as representing all areas of anticipated cost impacts resulting from OBRA '87. Cost impact projections from the EY evaluation were also accepted, subject to the adjustments detailed below.

The results of this analysis, relative to projected per diem impacts for the calendar years 1990 and 1991 are presented on pp. 12-13 of the Ernst & Young study (Attachment #1). For calendar year 1990 the projected impact of OBRA implementation was estimated at \$1.56 PPD, and for calendar year 1991 projection was made at \$6.77 PPD. Our first conclusion was that the 1990 figure drastically understated OBRA impacts, since it appeared to be based on a faulty manipulation of the collected data. That is, while full implementation of OBRA was mandated for October 1, 1990, and the costs to be incurred would only be impacted over 3 months in 1990, these total (3 month) 1990 costs were then divided by annual resident days for 1990. This calculation therefore appeared to understate 1990 Per Diem impacts by 75%. A corrected figure should have been \$6.24 PPD (i.e., $\$1.56 \times 4 = \6.24 , to account for costs as they are incurred). As a result of this, discussions were centered around the projected 1991 per diem impact of \$6.77 PPD (accepted from the summary of EY cost findings on pp. 12-13 of the EY study).

A working group of State and industry representatives met from June through August of 1990 to analyze the projected impacts of OBRA, as well as an implementation strategy. The first conclusion was that the \$0.32 PPD impact for Nurse Aide Training and the \$0.08 for Nurse Aide Competency Evaluations were to be excluded from the reimbursement rate calculations. The State will pay for these separately from the per diem reimbursement, as per a fee schedule. Consequently, the projected impact of OBRA implementation was reduced to \$6.37 (i.e., $\$6.77 - \0.40).

Upon analysis, it was determined that the costs for "on-going NA training" of \$0.08 PPD would be reflected in the cost reports filed semi-annually (on a calendar basis), given the timing of training requirements, and would also be addressed in the case-mix assessment instrument in place. Interim payments for this purpose would be included in the estimation of additional staff requirements, which is addressed below. This reduced the projected impact of OBRA '87 from the EY analysis to \$6.29 PPD (i.e., $\$6.37 - \0.08).

The State contested the projected impact of \$0.95 PPD in the EY analysis for removing SNF/ICF distinctions. Essentially, such distinctions were removed in terms of both licensure requirements and reimbursement instruments in 1984. The licensure change in 1984 required all facilities to retain a physician licensed in West Virginia to serve as a medical director. All nursing facilities in West Virginia are in compliance with this requirement, therefore, no additional cost will be incurred. This reduced the projected impact of OBRA implementation to \$5.34 PPD (i.e., $\$6.29 - \0.95).

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The State felt that the projection for revised nurse staffing, at \$0.14, understated the need presented by OBRA. Some considerable time was put into examining existing staffing patterns at all facilities, and comparing this to OBRA mandates. Based on this examination, it was determined that, on average, the revised nurse staffing impact, across skill levels, was expected to be \$0.52 PPD. This was projected as follows:

- a) The EY projection of \$0.08 PPD for "on-going Training" was accepted as an appropriate cost.
- b) While the existing case-mix reimbursement system allowed for adequate RN reimbursement levels in its parameters, it was determined that facilities would have to expand their RN coverage by 16 hours per week (weekend coverage). Based on a wage rate of \$12 per hour, this amounted to increased staff expenditures of \$192 (i.e., $12 \times 16 = 192$), or \$9,984 per year (i.e., $192 \times 52 = 9,984$). Multiplied across the 110 facilities included in the analysis, the total RN staff impact was projected at \$1,098,240. Based on approximately 3.4 million total patient days in these facilities, the projected impact of additional RN staff expenditures is \$0.32 PPD (i.e., $1,098,240 / 3,400,000$).
- c) Analysis of detailed data from these 110 facilities indicated that, on average, the Payroll Taxes and Benefits component for RN staff is approximately 37.5%. Therefore, this factor was applied to the increased RN staffing expenditure for an additional impact of \$0.12 PPD (i.e., $0.32 \times .375$).

These three staffing impact estimates indicate an increased expenditure of \$0.52 PPD (i.e., $0.08 + 0.32 + 0.12 = 0.52$), or \$0.38 higher than the EY estimate (i.e., $0.52 - 0.14 = 0.38$). Consequently, the impact of OBRA '87 implementation was increased to \$5.72 (i.e., $5.34 + 0.38$).

Of this remaining \$5.72 PPD projected impact, discussion and review determined that approximately \$3.88 represented purely labor costs that could be eliminated by implementation of a total computerized system to account for the MDS, plans of care and updates, admission and discharge, management of resident funds, etc. The areas of impact and savings are summarized as follows:

<u>ITEM</u>	<u>E&Y</u>	<u>REVISED</u>	<u>SAVINGS</u>
Quality Assurance Committee	\$0.16	\$0.13	\$0.03
Developing Plans of Care	0.62	0.28	0.34
Updating Plans of Care	1.90	0.18	1.72
Annual Resident Assessment	1.16	0.45	0.71
Quarterly Resident Assessment	0.25	0.15	0.10
Psychopharmacological Drug Review	0.02	0.02	-0-
Discharge/Transfer	0.75	0.07	0.68
Management of Resident Funds	0.34	0.04	0.30
Computer Training/Data Entry	-0-	0.14	-0-
		<u>-----</u>	<u>-----</u>
TOTALS		<u>\$1.46</u>	<u>\$3.88</u>

The calculations of the revised cost estimates are shown below:

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QUALITY ASSURANCE COMMITTEE (1919(b)(1))

The committee must consist of the Director of Nursing, a physician, and three other members of the facility staff. The committee meets quarterly to identify and plan to correct identified quality deficiencies.

We believe that both the computerization of numerous care planning activities and drug interactions, as well as allowances for increased quarterly in-service training, will serve to drastically decrease survey and quality deficiencies. Additionally, much of this staff activity is already required by State Licensure. However, we have allowed for \$1,000 per quarter per facility in the interim period, which will account for any additional staff time requirements. Therefore, estimate is made at:

$$\frac{\$1,000 \times 4 \text{ quarters} \times 110 \text{ facilities}}{3,400,000 \text{ Patient Days}} = \$0.13 \text{ PPD}$$

DEVELOPING PLANS OF CARE (1919(b)(2))

State licensure already requires an interdisciplinary patient care conference involving a Registered Nurse, director of social work, activities director, dietary director, rehabilitative services, physician, the patient, if able, and the family. Individual assessments are completed by each discipline prior to the conference. Further, the computer/software system can be expected to reduce the staff time involved.

An allowance was made for an additional 80 hours of physician time per facility to account for initial plan of care reviews and upgrading of those plan of care activities where needed. Therefore:

$$\begin{aligned} 80 \text{ hours} \times \$110/\text{hour} &= \$8,800 \text{ per facility} \\ \times 110 \text{ facilities} &= \$968,000 \\ - 3,400,000 \text{ patient days} &= \$0.28 \text{ per patient day} \end{aligned}$$

UPDATING PLAN OF CARE (1919(b)(2))

An additional total staff cost of \$16.00 per quarter was made to review and revise existing EDP care plans (which are already continually updated), plus \$0.50 supply costs. R.N. overtime costs are allowed as other staff is accounted for in per diem rate.

$$\begin{aligned} \$16.50 \text{ per quarter} \times 4 \text{ quarters} &= \$66.00 \\ \$66.00 & \\ \hline &= \$0.18 \text{ p.p.d.} \\ 365 \text{ days} & \end{aligned}$$

ANNUAL RESIDENT ASSESSMENT (1919(b)(3))

The resident assessment is conducted annually and is coordinated by an R.N. or the DON with other staff and health professionals including physical, occupational and speech therapists, and a physician.

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Computerized EDP package will result in significant savings of time in the development of the initial resident assessment and/or annual updates. Based on this savings, an allowance is made per resident for:

RN or DON = 2-1/2 hours at \$13.50/hr = \$33.75
Professional Staff = 1-1/2 hours at \$50.00/hr = \$75.00
MD = 1/2 hours at \$110/hr = \$55.00

\$163.75
----- = \$0.45 P.P.D.
365 days

QUARTERLY RESIDENT ASSESSMENT (1919(b)(3))

The quarterly resident assessment is conducted by the DON or R.N. The computerized EDP package provides current service/care status for all residents in that the annual resident assessment is updated at any time a significant change in the resident's condition occurs. Other disciplines are involved in the updates to the resident's assessment and plan of care. The DON/RN would then review the updated assessments for the residents on a quarterly basis. Therefore, one hour of DON/RN time per quarter will be required at \$13.50 per hour.

RN or DON = 1 hour at \$13.50 x 4 = \$54.00
\$54.00
----- = \$0.15 PPD
365 days

PSYCHOPHARMACOLOGICAL DRUG REVIEW (1919(c)(1))

The \$0.02 p.p.d. cost was accepted from the Ernst and Young study, therefore, no savings are attributable to this item.

TRANSFER AND DISCHARGE NOTICE (1919(c)(2))

The State Department of Health and Human Resources has an established appeal process for Medicaid recipients which includes residents of nursing facilities. The hearing process does not require a lawyer. Therefore, an allowance was made for 180 hours per facility of RN time at \$12.00/hour.

180 hours x \$12.00/hour x 110 facilities
----- = \$0.07 p.p.d.
3,400,000 patient days

MANAGEMENT OF RESIDENT FUNDS (1919(c)(6))

State licensure requires surety bonds identified in the Ernst and Young study as a cost and, as also noted in the study, a computer system lowers the cost. The computer and software have been purchased for each facility, so only marginal business office staff time is required, as each individual account handled requires very minimal marginal time. Therefore, an additional cost of \$100.00 (maximum) per facility per month, based on 6 hours at \$15.00/hour = \$90.00, plus \$10.00 supply cost, is allowed. That is, \$100/month x 12 months x 110 facilities = \$132,000

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$$\frac{\$132,000 \text{ annual cost}}{3,400,000 \text{ patient days}} = \$0.04 \text{ p.p.d.}$$

Given the savings to be realized from automation, the State mandated the purchase of approved hardware and software by each facility, and made this a standard of participation in the Medicaid program. A one-time purchase of up to \$12,000 was approved per facility, as detailed elsewhere. By replacing these purely labor costs with an automated system for the designated requirements, the projected impact of OBRA was reduced to \$1.84 PPD (i.e., \$5.72 - \$3.88). It should be noted that training requirements for the computer were accounted for in the \$12,000 purchase price, since the software purchase cost included an allocation of \$1,500 for three (3) days of on-site training for each facility.

COMPUTER TRAINING/DATA ENTRY

Despite the savings in labor costs to be expected from implementation of the computerized methodology, it was recognized that there would be costs associated with training of staff on the hardware and software, beyond that which is included in the purchase price, as well as initial data entry requirements for existing residents. These start-up requirements were projected at 288 hours per facility at an average cost of \$15 per hour, or \$4,320 per facility (i.e., 288 x \$15 = \$4,320). For the 110 facilities of the analysis, this amounts to \$475,200 (i.e., 110 x \$4,320), or \$0.14 PPD (i.e., \$475,200/3,400,000 = \$0.14 PPD). Consequently, the projected impact of OBRA '87 implementation was increased to \$1.98 PPD (i.e., \$1.84 + \$0.14). This amount will be added to the calculated reimbursement rates for the period 10/1/90 - 3/31/91, and again for the period 4/1/91 - 9/30/91.

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the OBRA 1987 requirements. The content of any subsequent regulations, guidelines or legislative changes could alter the results of this report. However, because facilities will be, and likely have, incurred significant costs in complying with these requirements, and because of the cycles on which State budgets are developed, it was necessary to make these predictions on the state of the law and upon the best data available at that time. ^{8/}

II. SUMMARY OF PROJECTION OF INCREMENTAL COSTS THAT WEST VIRGINIA'S FACILITIES WILL INCUR IN COMPLYING WITH OBRA 1987

A. Projected Costs By Individual Item

(NA = nurse aide)

		<u>Cost Per Patient Day</u>			
		1989*	1990*	1991*	1992*
NA training	(1)	\$0.20	\$0.28	\$.32	\$.33
On-going NA training	(1)	0.00	0.07	0.08	0.08
NA competency evaluations	(1)	0.05	0.07	0.08	0.08
Developing plans of care		0.00	0.15	0.62	0.66
Updating plans of care		0.00	0.00	1.90	2.02
Quality assurance committee		0.00	0.04	0.16	0.17
Annual resident assessment		0.00	0.28	1.16	1.23
Quarterly resident assessment		0.00	0.06	0.25	0.27

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Revised nurse staffing	0.00	0.03	0.14	0.15
Elimination of SNE/ICF distinctions	0.00	0.23	0.95	1.01
Social service requirements	0.00	0.00	0.00	0.00
Psychopharmacologic drug reviews	0.00	0.01	0.02	0.02
Management of resident funds	0.00	0.08	0.34	0.36
Facility admission agreements	0.00	0.08	0.00	0.00
Involuntary discharges & transfers	0.00	0.18	0.75	0.81

TOTALS (1) (2)	\$0.25	\$1.56	\$6.77	\$7.19
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Active Treatment For MR/DD & MI Residents (3)	\$0.00	\$14.05	\$19.60	\$20.85
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TOTAL PROJECTED MEDICAID COSTS (1) (4)
(in thousand dollars)

	1989	1990	1991	1992
Est. OBRA '87 Nursing Home Impact	\$837	\$6,186	\$26,018	\$29,024
Total Est. Nursing Home Medicaid Cost	\$597	\$4,410	\$18,549	\$20,692
Approx. State Fiscal Portion	\$140	\$1,032	\$4,339	\$4,840

* 1989 is period January 1, 1989 - December 31, 1989;
1990 is period January 1, 1990 - December 31, 1990;
1991 is period January 1, 1991 - December 31, 1991;
1992 is period January 1, 1992 - December 31, 1992.

- (1) Assumes NA training occurs with no overtime.
- (2) Does not include active treatment for MR/MI residents.
- (3) Cost for each day of active treatment projected only to MR/MI residents. When projected across all residents, change in State cost would be \$.00 for 1989, \$.20 for 1990, \$.28 for 1991 and \$.30 for 1992.

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